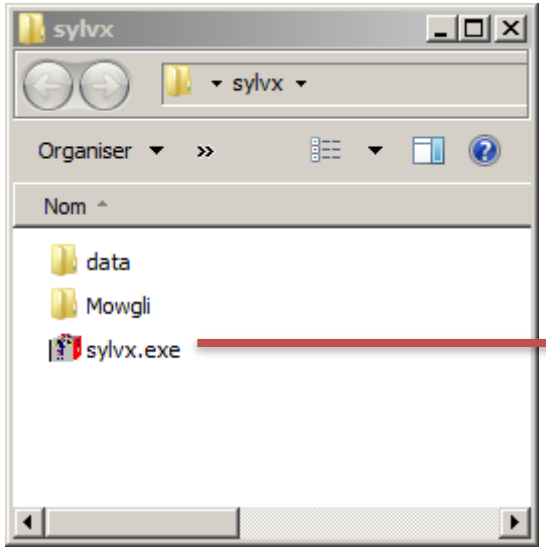
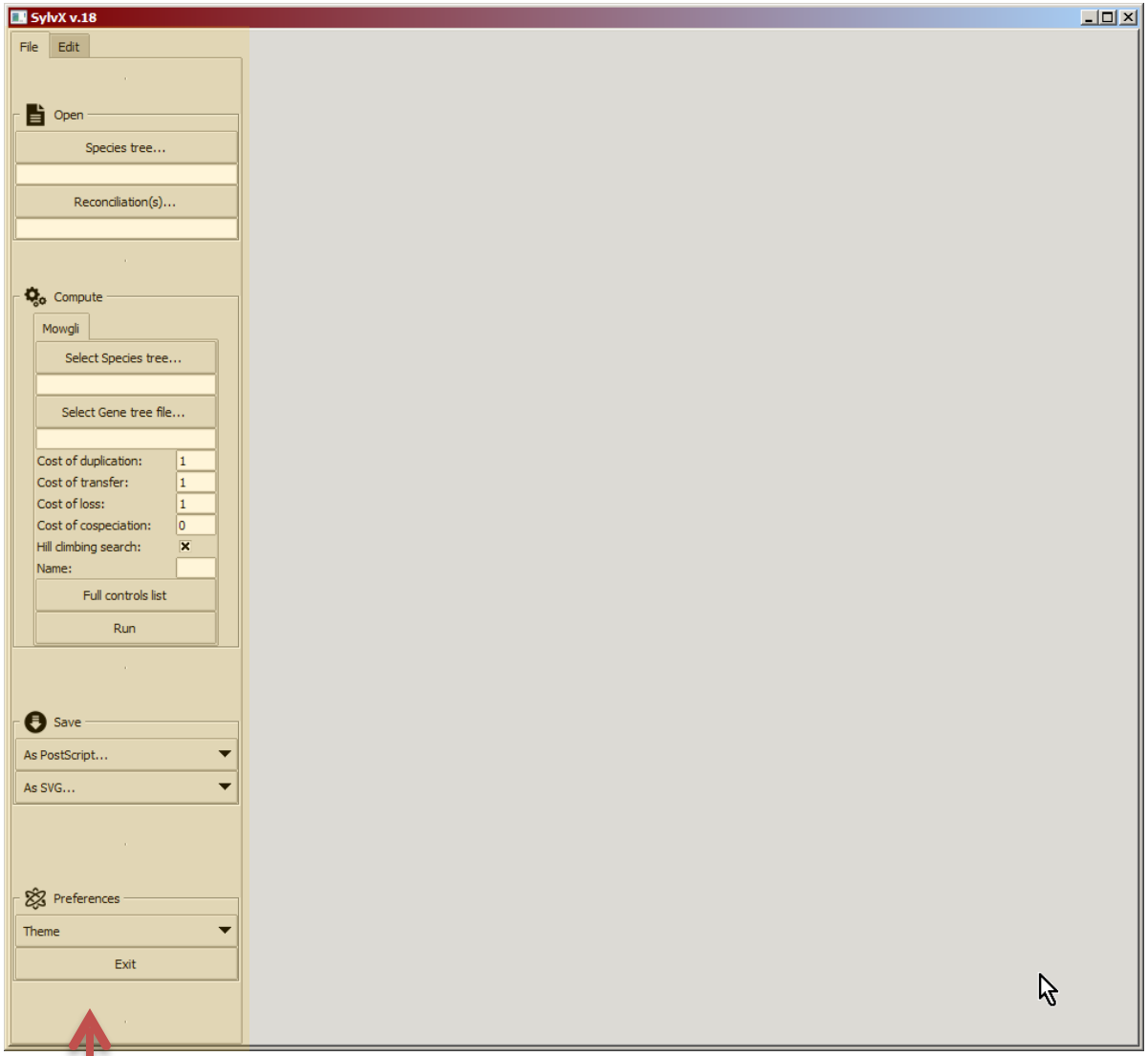
SylvX User's Manual 1.0

E. Jousselin & F. Chevenet

- Launch SylvX
- Data to Load: 1/2) load the species tree
- Data to Load: 2/2) load a reconciliation file
- Display a reconciliation: 1/2) target a map
- Display a reconciliation: 2/2) select a reconciliation
- Display another reconciliation: target another reconciliation
- Display two reconciliations: 1/2) add a map
- Display two reconciliations: 2/2) display the reconciliation
- SylvX Interface overview
- « Map » toolbox overview
- « Reconciliation(s) » toolbox overview
- « Species tree » toolbox overview
- Species tree and annotations combination
- Data to Compute with Mowgli: 1/3) select the species tree
- Data to Compute with Mowgli: 2/3) select the gene tree
- Data to Compute with Mowgli: 3/3) Mowgli settings and run
- Output graphics

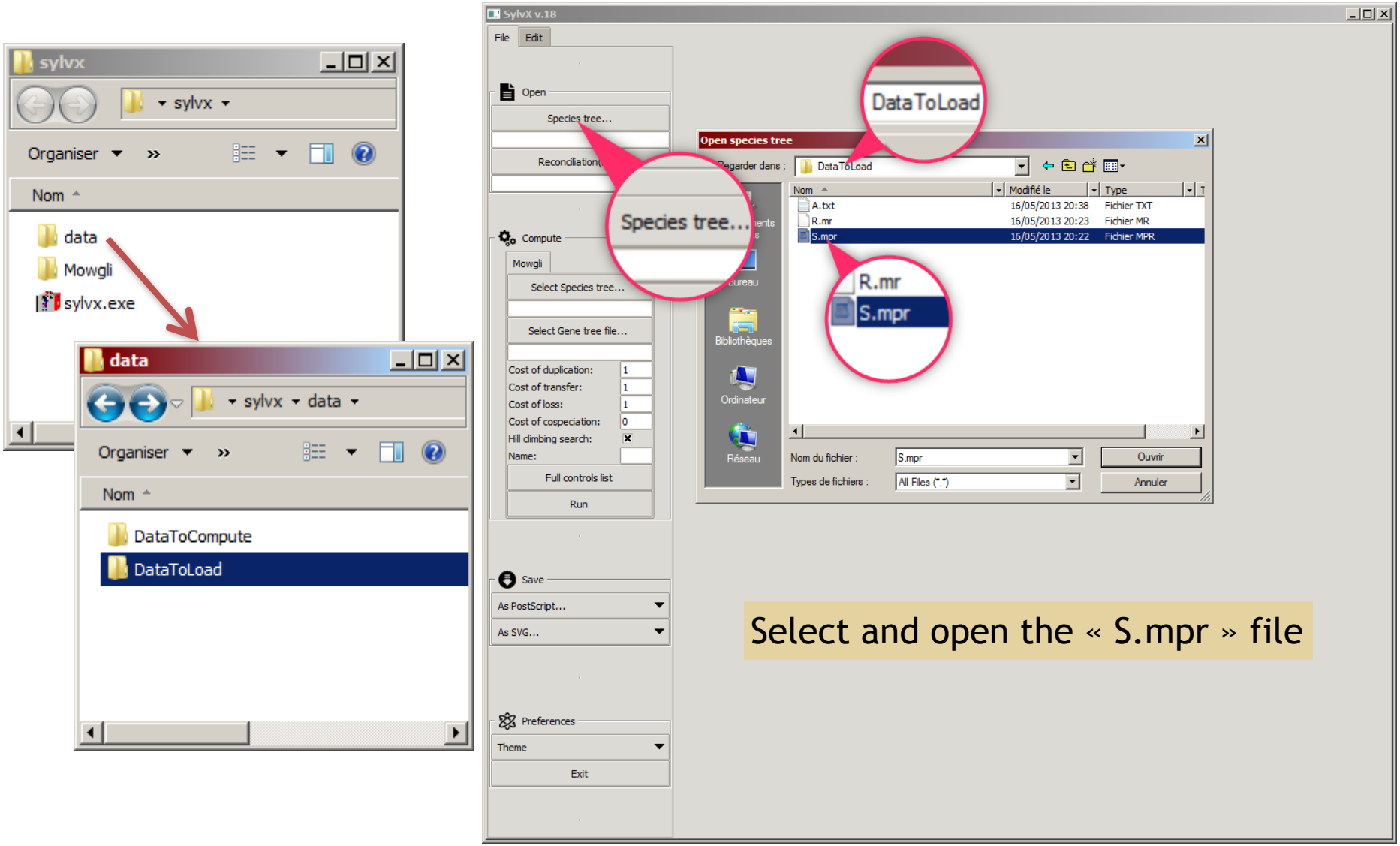
Launch SylvX





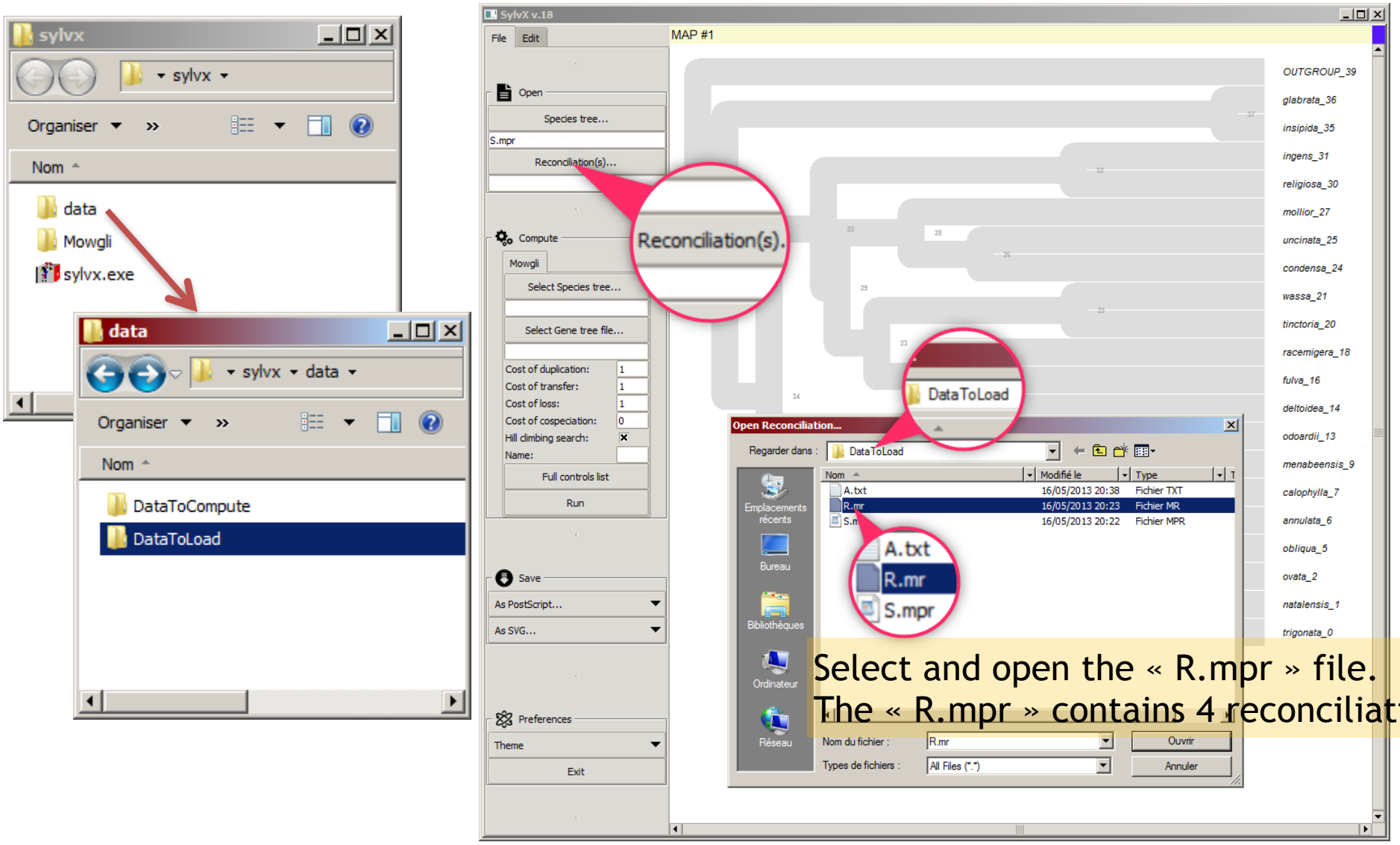
All the SylvX's controls are on the left side of the interface

Data to Load: 1/2) load the species tree

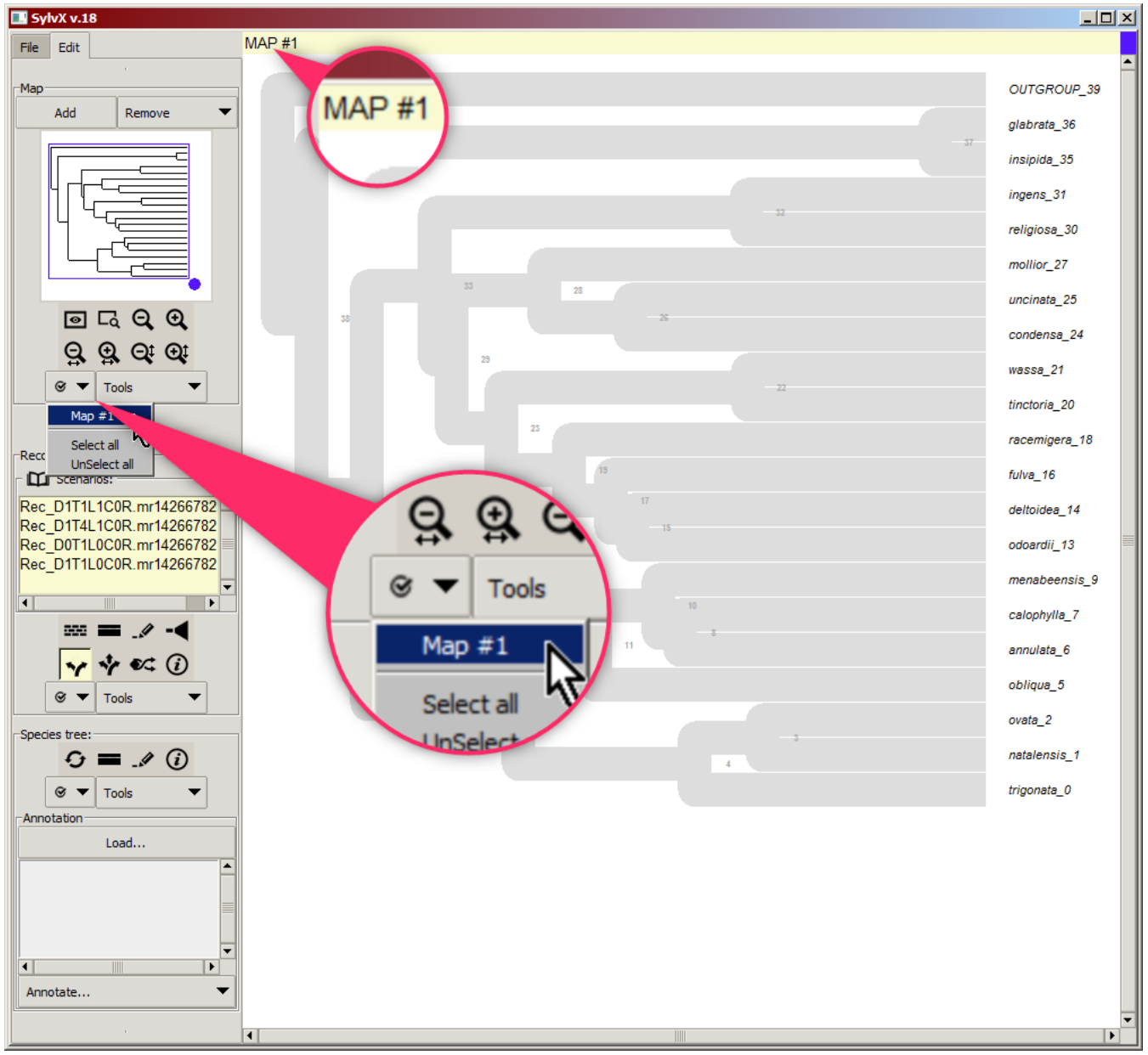


Select and open the « S.mpr » file

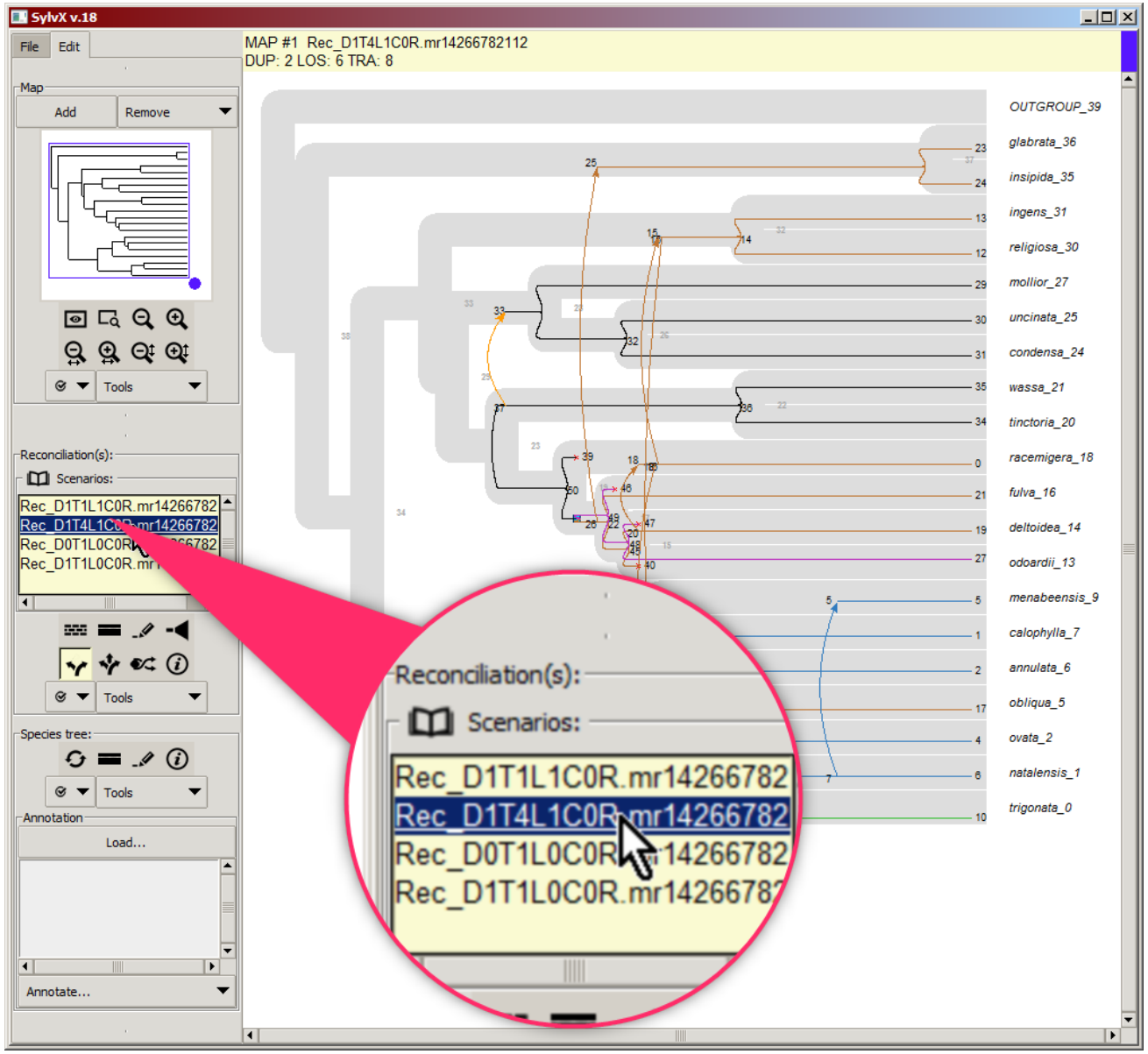
Data to Load: 2/2) load a reconciliation file



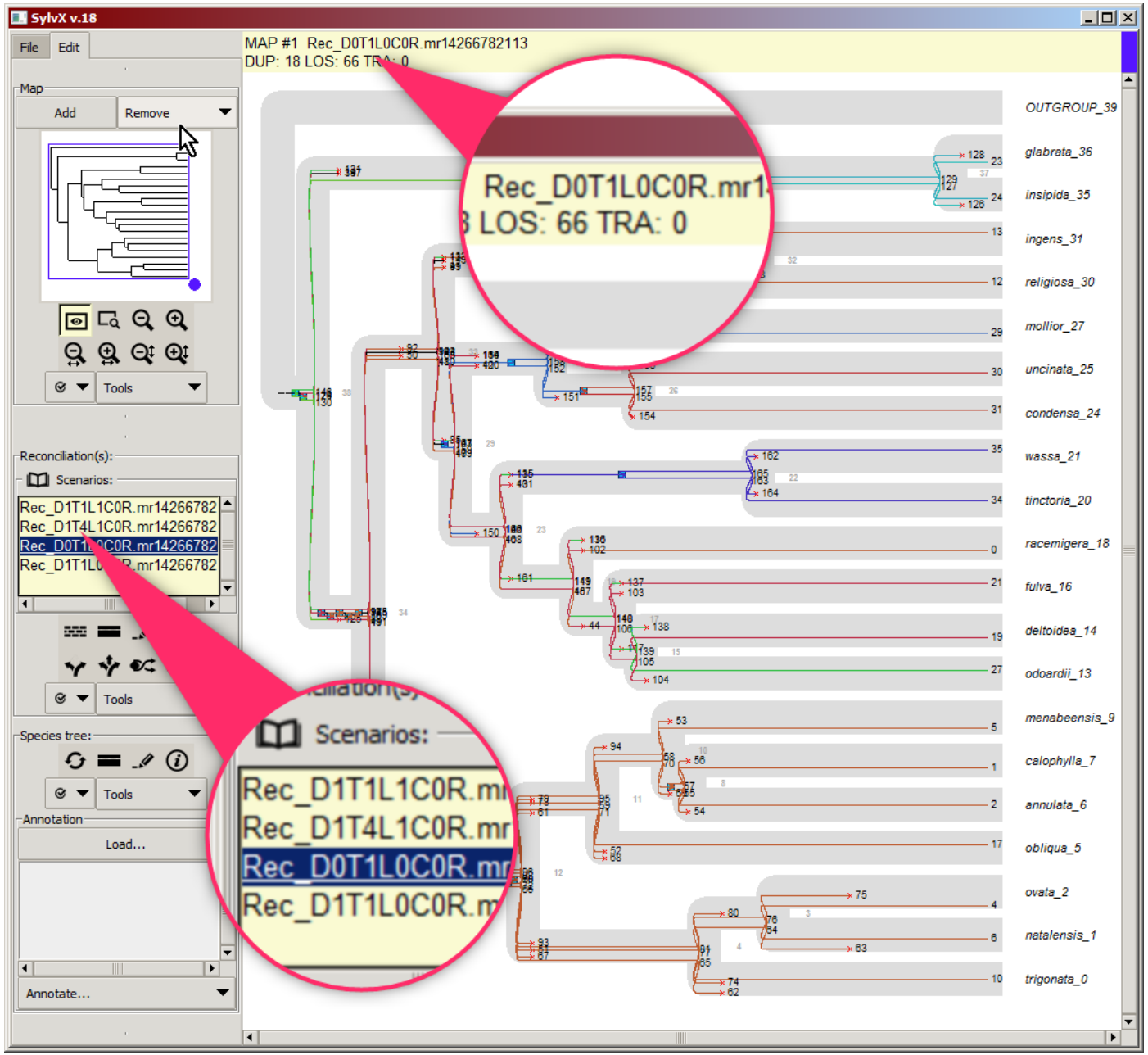
Display a reconciliation: 1/2) target a map



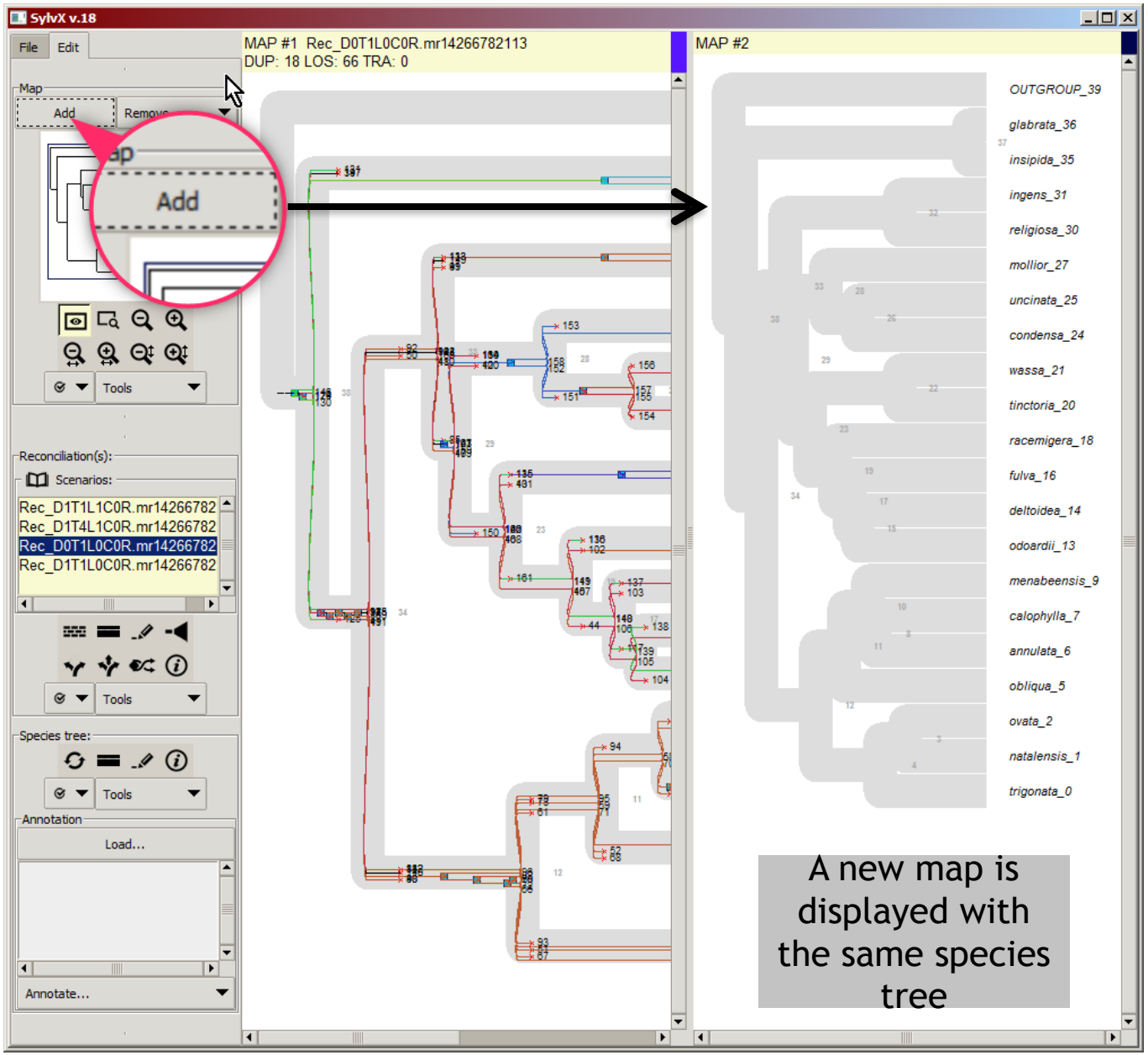
Display a reconciliation: 2/2) select a reconciliation



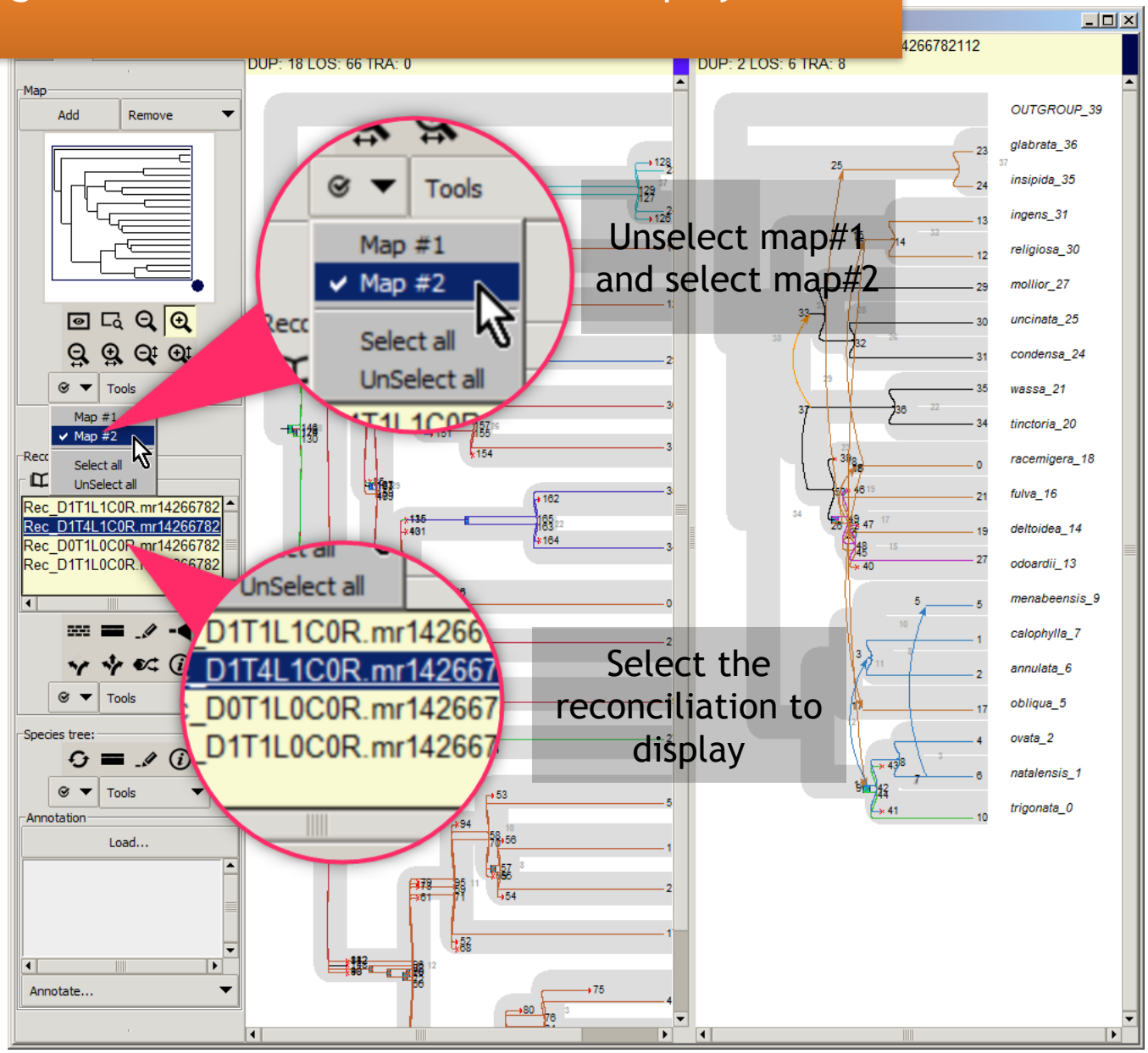
Display another reconciliation: target another reconciliation



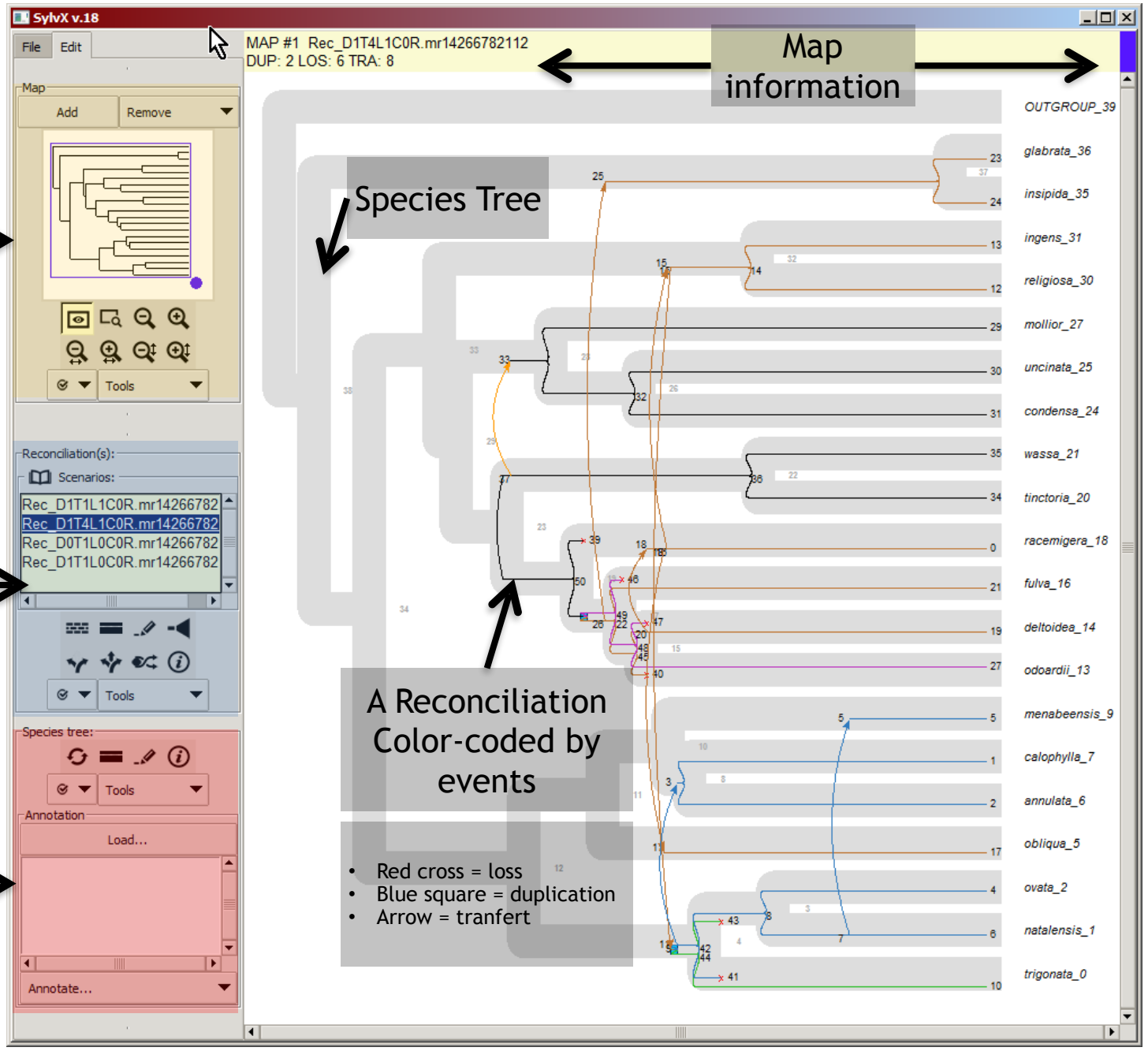
Display two reconciliations: 1/2) add a map



Display two reconciliations: 2/2) first target the map#2 only and then target the new reconciliation to be displayed on map #2



SylvX Interface overview

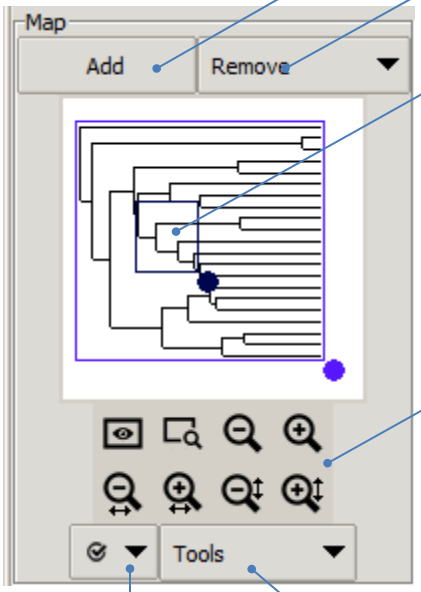


« Map(s)» toolbox
(tools working on species trees AND reconciliations)

« Reconcilation(s) » toolbox

« Species Tree » toolbox

« Map » toolbox overview



Add a new map, the species tree is automatically displayed

The menu displays all the available maps. Select a map to delete it

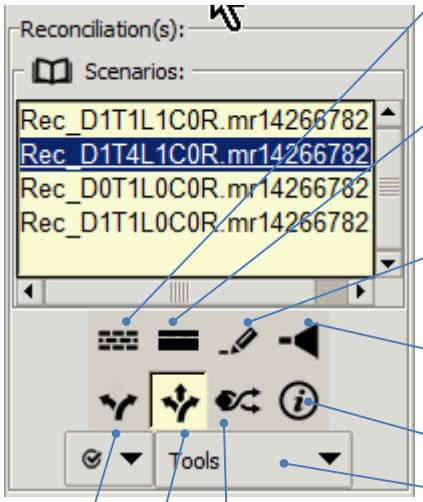
Each map has a color ID (up right corner of each map). Each map has also a zooming brush using the corresponding color. Left-click the circle (down right corner) and drag it to resize the brush and set a zooming factor. Select the brush border to move it (left click and drag). The corresponding map is updated following the position and size of its brush

Tools to be activated (left clic) then apply manually on map(s). From left to right, up to down : fit to window (left clic on the map), Magnify (left clic and drag to display a frame which will be used to zoom in the map). Zoom Out, Zoom In, Zoom Out (only x), Zoom In (only x), Zoom Out (only y), Zoom In (only y)

Command tools working on the current map selection

Map targetting menu. This menu lists all the available maps. A map can be selected or unselected. The selection is inclusive. Target a map before selecting a reconciliation.

« Reconciliation(s) » toolbox overview



Dash line. Left-clic the tool to activate it, then apply it on the fly to internal nodes of a reconcialiation to set on/off dash line of the corresponding subtree

Line width. Left-clic the tool to activate it, then apply it on the fly to internal nodes of a reconcialiation to set increase/decrease (Shift-left-clic) the line width of the corresponding subtree

Foreground color. Left-clic the tool to activate it, then apply it on the fly to internal nodes of a reconcialiation to set increase/decrease (Shift-left-clic) the line width of the corresponding subtree

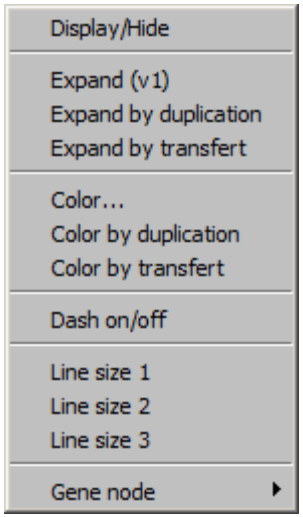
Shrink. Left-clic the tool to activate it, then apply it on the fly to internal nodes of a reconcialiation to hide the corresponding subtree (including transfert events).

Information. Left-clic the tool to activate it, then apply it to an internal node of a reconciliation to insert an annotation.

Information. Left-clic the tool to activate it, then apply it to internal node of the species tree to expand underlying duplications.

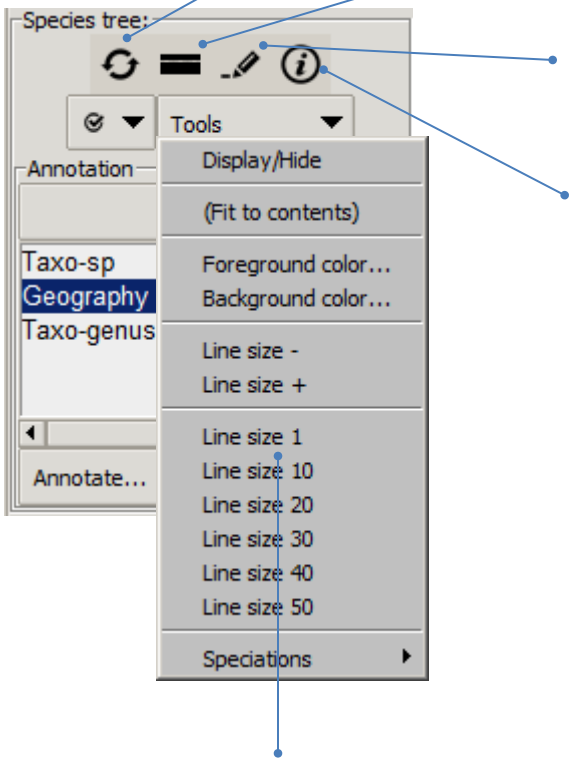
Move subtree. Left-clic the tool to activate it, then apply it on the fly to a segment of a reconciliation to move the underlying subtree

Move segment. Left-clic the tool to activate it, then apply it to the segments of a reconciaiation to move it (including transfer events). The translation is local.



Commands working on the whole sprecies trees (targeted ones)

« Species tree » toolbox overview

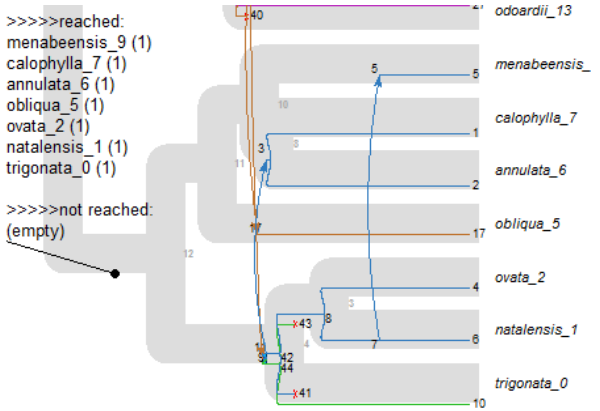


Swap, left-clic the tool to activate it, then apply it (left-clic) to internal nodes of the species trees (note that this operation resets the tree with its reconciliation)

Line width, left-clic the tool to activate it, then left-clic species tree segments to increase their sizes or Shift/left-clic to decrease their sizes

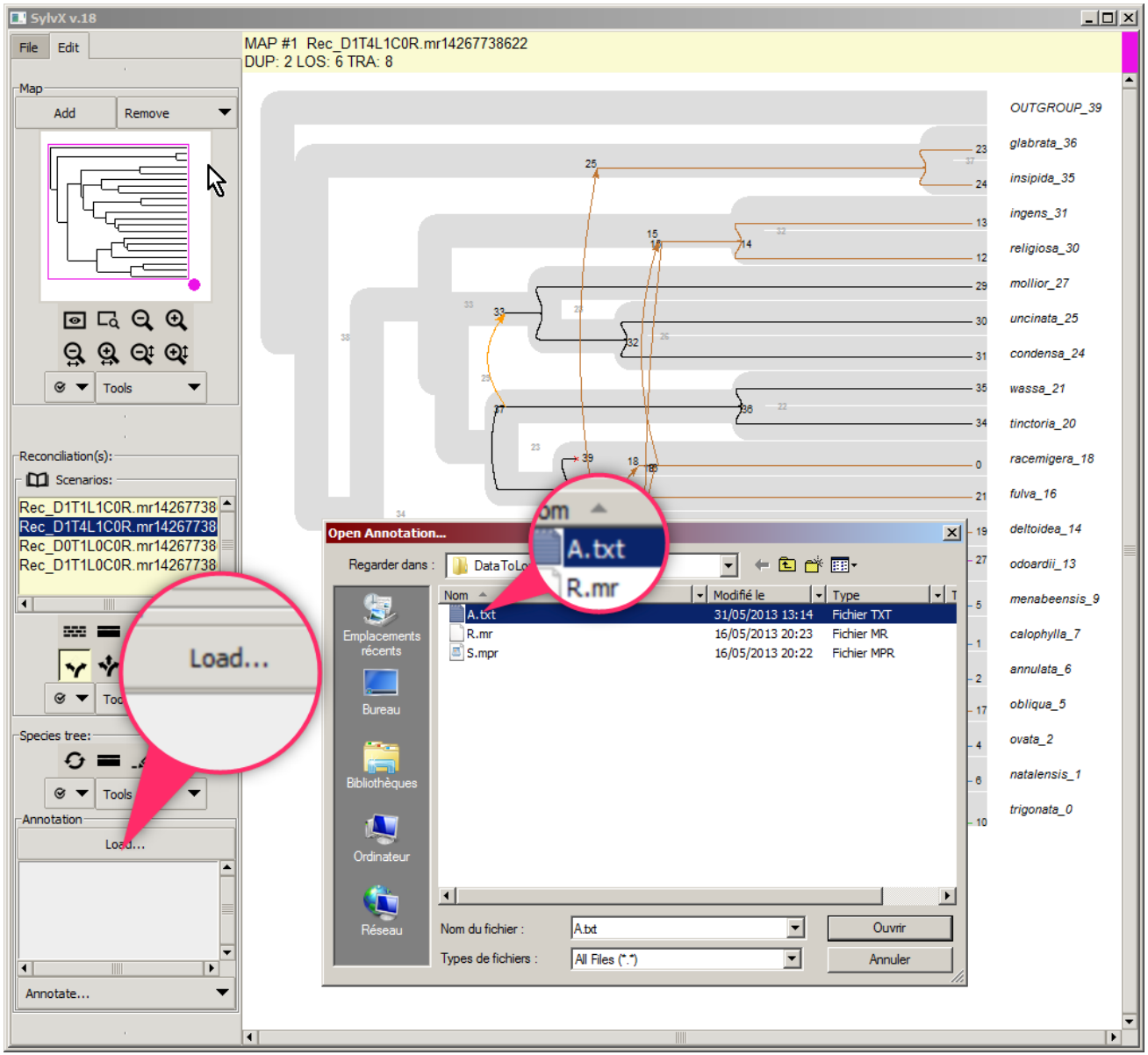
Foreground color. Left-clic the tool to activate it, then select a color and apply it To the species tree segments

Information. Left-clic the tool to activate it, then apply it to internal node of the species tree to insert an annotation.



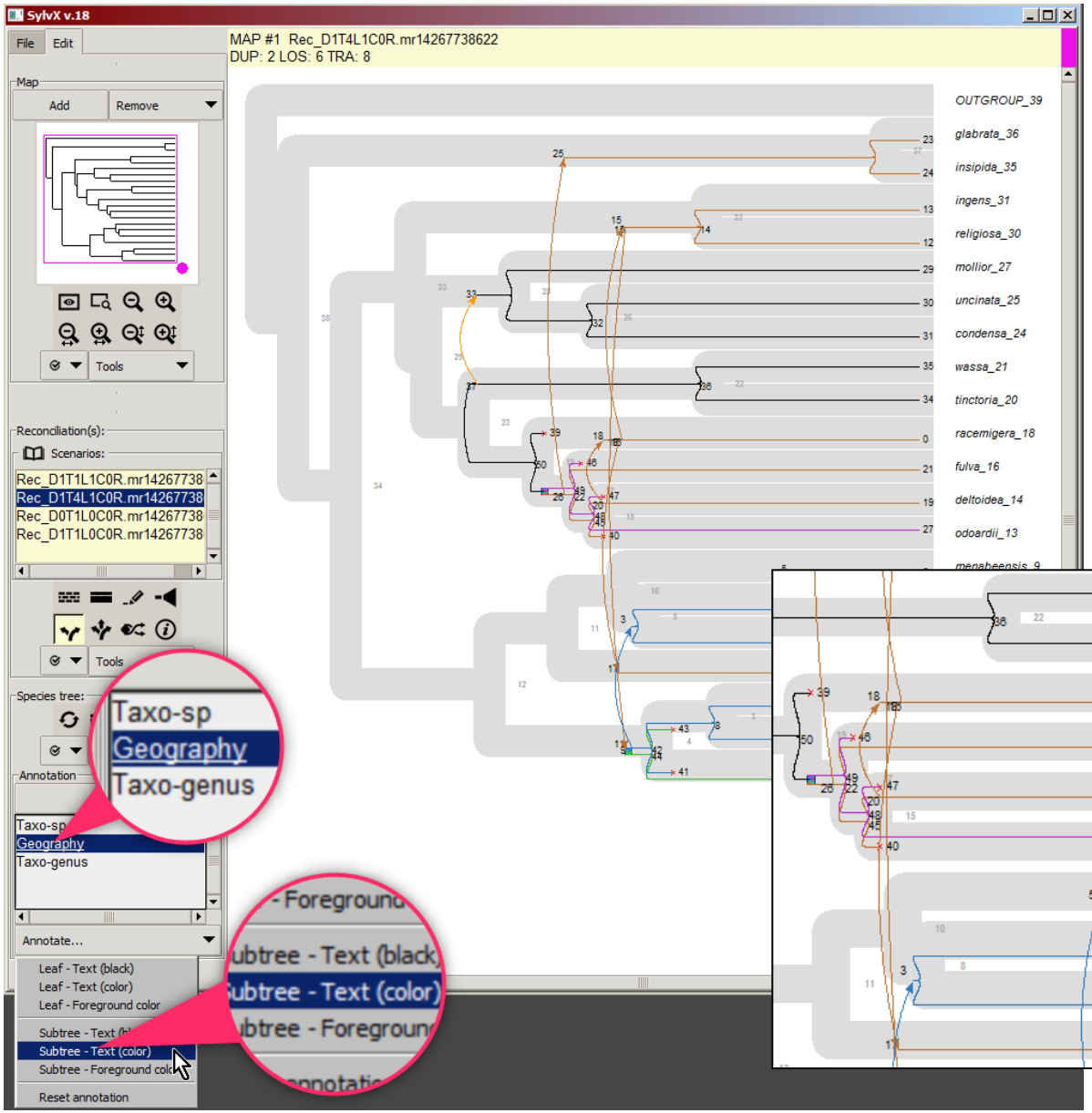
Commands working on the whole species trees (targeted ones)

Species tree and annotation combination



Load an annotation file

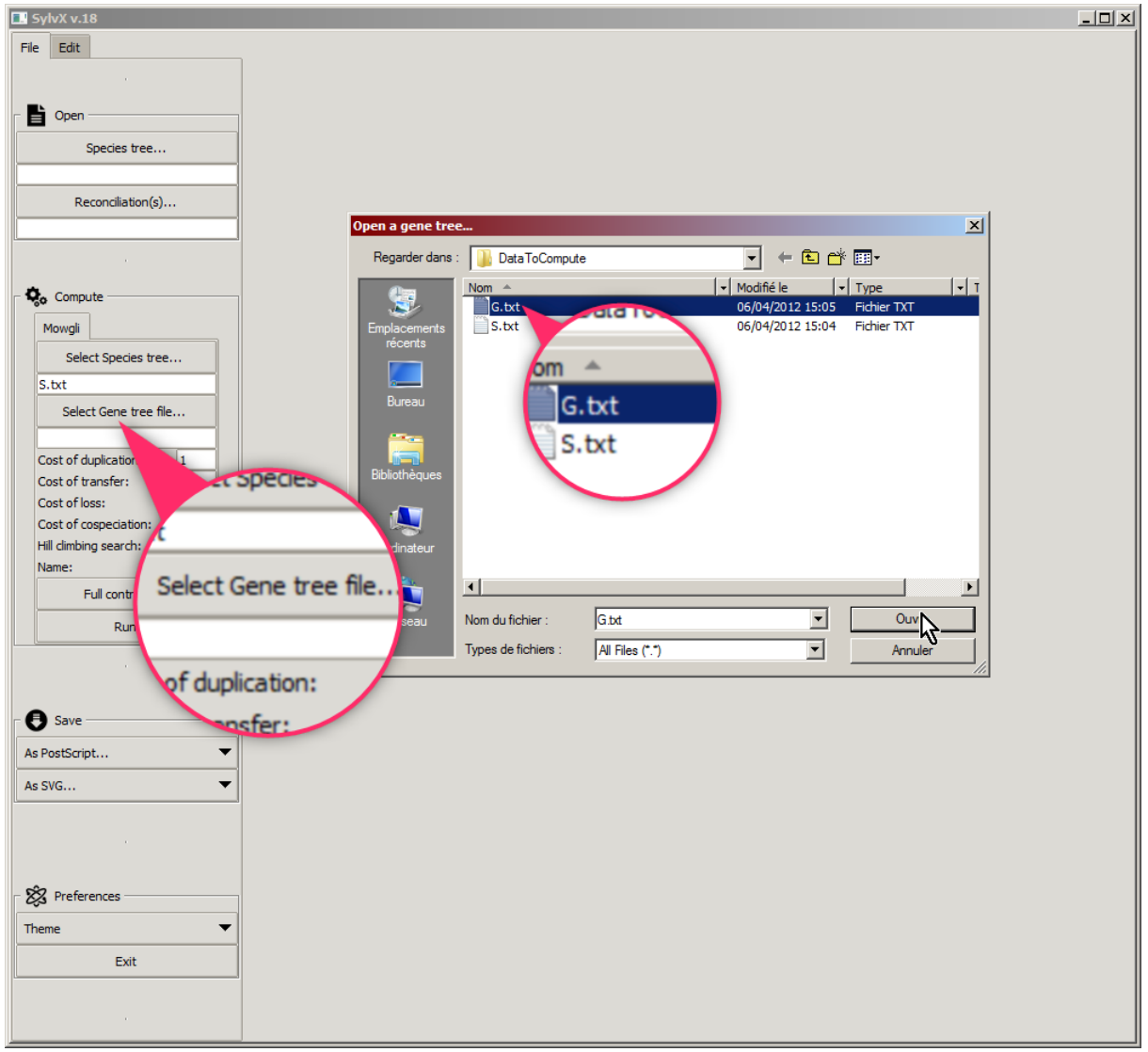
Species tree and annotations combination



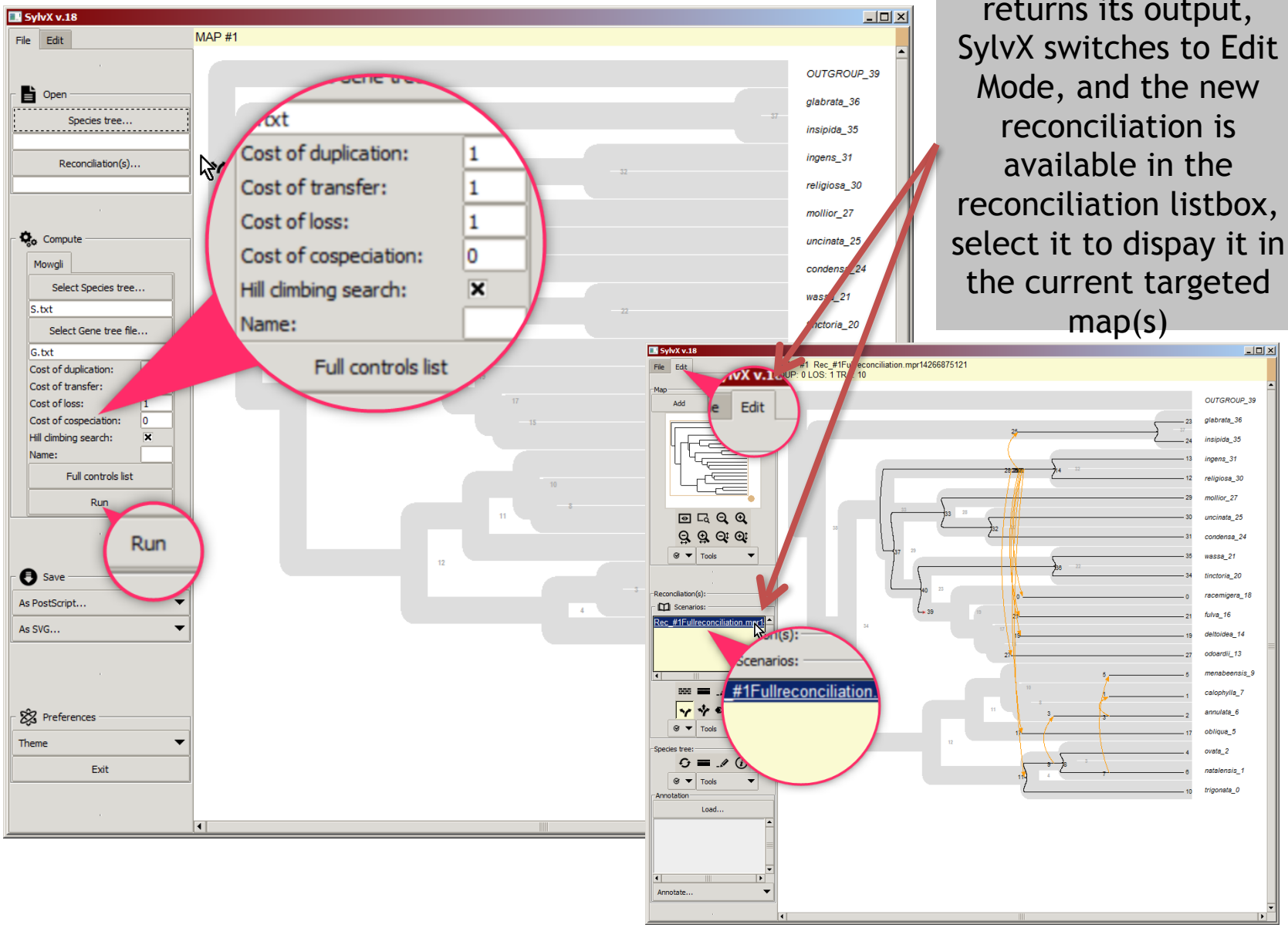
1) Select an annotation (e.g. Geography)
2) Select a command (e.g. « Subtree - Text (color) »

Data to Compute with Mowgli: 1/3) select the species tree

Data to Compute with Mowgli: 2/3) select the gene tree

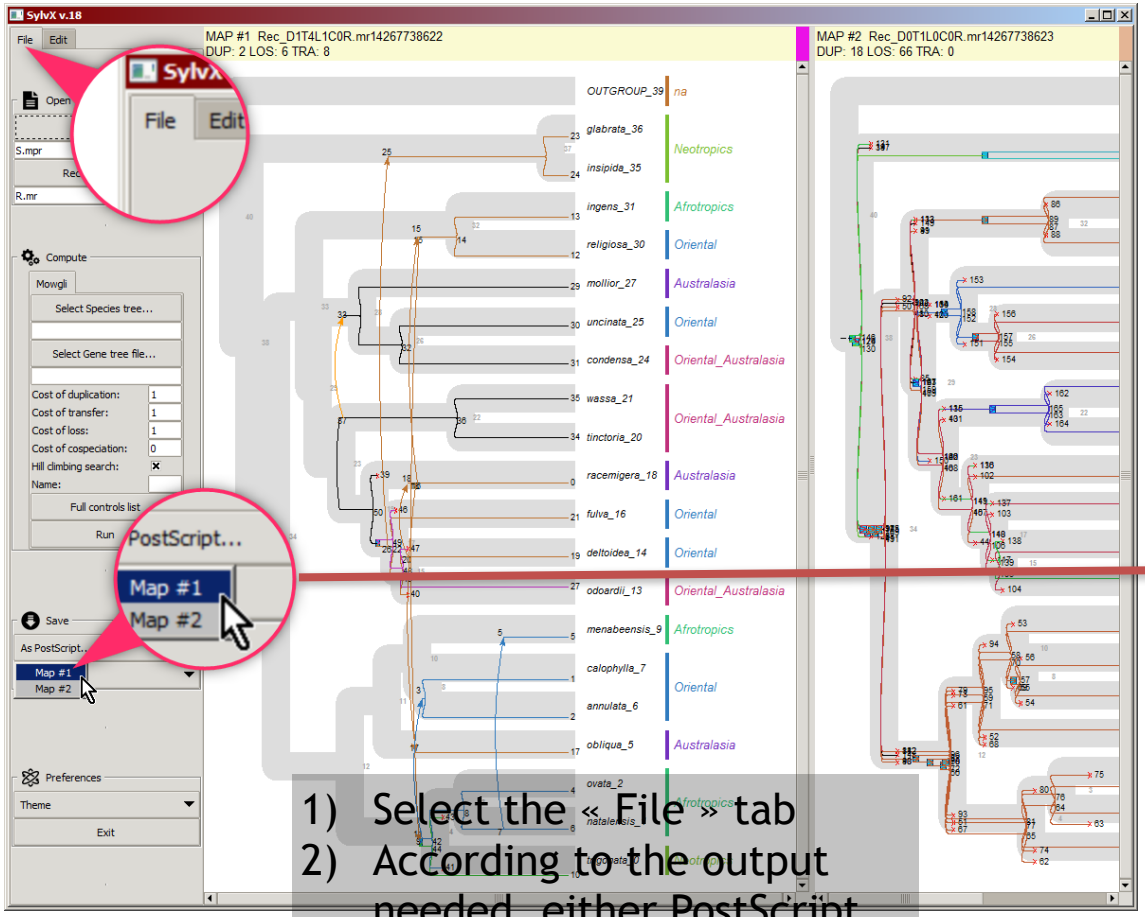


Data to Compute with Mowgli: 3/3) Mowgli settings and run



As soon as Mowgli returns its output, SylvX switches to Edit Mode, and the new reconciliation is available in the reconciliation listbox, select it to dispay it in the current targeted map(s)

Output graphics



1) Select the « File » tab
2) According to the output needed, either PostScript (PS) or Scalable Vector Graphics (SVG), select the corresponding menu and target the map to be exported